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SCABIOSA.



JANUARY, 1884.

A HAPPY NEW YEAR. Probably no expression is more genuine, consciously or unconsciously, though apparently only a compliment, as we now offer it to our readers, and as each of them, and all the world, at this season, salute their neighbors. Happiness is the universal desire of humanity, and in our better moods we recognize, perhaps intuitively, our own welfare in that of others. How may we experience what all so earnestly desire? Those were grand words, spoken eighteen hundred years ago, "the kingdom of heaven is within you." And if we could comprehend their import, and govern our lives thereby, how might we oftener walk in the ways of pleasantness and the paths of peace. With a sound mind in a sound body, this inward rest consists naturally with outward activity. The mind is satisfied only as it is employed. Great riches do not necessarily bring their possessor a quiet mind, usually the reverse. The most absolutely restless and unhappy mortals are those who, with abundance of wealth, have no aim and no mission in life; their capacities are smothered by their riches. Take a plant and place it in a closed pot of rich soil, or in the open ground where the elements of fertility are in the best possible condition for growth, but where the water is stagnant, and from that moment it begins to droop, its leaves to wither and fall, and it becomes a prey

to insects and mildew. It is dying of its abundance. But open the waterways and immediately it begins to take from the soil what it needs, it reclothes itself with verdure, its parasites disappear, and it flourishes with its natural vigor. Our possessions are blessings only as we can use them. Growth and activity are phenomena of life, consequently the real enjoyment of life is possible only while the mind is making advancement, or is following the bright star of hope, which, if illusive, is enchanting. All those who have horticultural tastes have before them a field which may yield them a rich return. The beauties and the wonders of nature appear for their enjoyment, and many of its mysteries are revealed to the patient and watchful seeker. It would be pitiable, if it were possible, that one could tend and rear plants and receive from his labor only material returns, while the harvest of wisdom and moral lessons is so plentiful and so ready to be gathered. Garden pursuits and the studies of nature are of so endless a variety that the most active and profound intellects can be busied during a lifetime, only with their smallest portion. Here, then, is an activity which conduces to that frame of mind most favorable for the attainment, if not of happiness, of that element of it, at least, which we call contentment—a mind at rest, because occupied.

THE PLUMED HYDRANGEA.

The beautiful flowering shrub shown in the illustration below, although disseminated for several years in this country, has not yet been sufficiently planted, nor are its merits fully known. Few have seen it except as a comparatively small shrub. The specimen here represented measured seven feet in

is said to be one of the commonest forms of *Hydrangea* in Japan, which are there numerous. It sometimes grows to a height of twenty-five feet, with a straight trunk six inches in diameter for a distance of about five feet from the ground, and then throws out numerous branches, forming a dense, round head; but it is more frequently found as a small or medium-sized shrub. It bears enormous panicles



HYDRANGEA PANICULATA GRANDIFLORA. FROM A PHOTOGRAPH.

height and nine feet in diameter, forming a grand object, loaded, as it was, with immense trusses of bloom. As will be observed, it is bush-like in habit, having numerous stems, but the plant is easily trained to a single stem, if that form is desired.

It is now nearly seventeen years since this plant was first brought from Japan by Dr. SIEBOLD, and introduced into France, whence it soon after found its way to this country. The typical species

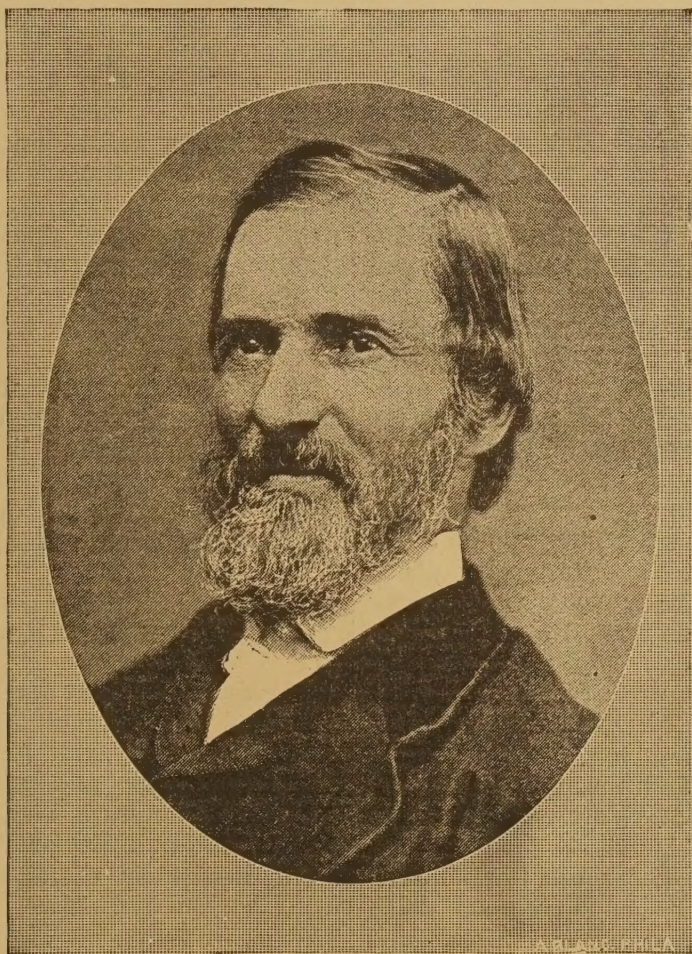
of flowers, but instead of being showy, as those of our subject, there is only one of the sterile or showy flowers on each main branch of the flower cluster; the rest of the flowers are small and fertile, but in the aggregate making a great mass.

Besides *grandiflora* there are two other varieties, one called *floribunda*, and another, minor; both of these have comparatively little merit as ornamental plants, and do not attract the attention of cultivators. There are two sub-varie-

ties of grandiflora, one with pure white flowers, alba, and the one, rosea-alba, whose flowers open a creamy white, changing to a clear white, and afterwards assuming a rosy tinge. This is the one most disseminated, and which is here figured. One of the advantages of this shrub is its late flowering habit. It blooms on the new wood of the same season's growth, commencing the latter part of summer and continuing well into

SAMUEL MILLER.

Among the few persons in this country who have become conspicuous for raising and introducing new varieties of fruits, SAMUEL MILLER, of Bluffton, Missouri, stands prominent. With a taste for fruit raising, cultivated from boyhood, it may very properly be said that the production and dissemination of new fruits has been his life work, although



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the latter part of autumn. Its grand panicles of flowers are often a foot or more in length, of a conical shape, and from six to ten inches in diameter at the base, and these are produced in great profusion and for weeks remain in good condition. In this part of the country, and, in fact, throughout the north, the *Althæa* has been the principal flowering shrub for late summer and fall, and *Hydrangea paniculata grandiflora* is a most important and valuable addition, yielding its wealth of blooms at a time when it is exceedingly effective, and adds wonderfully to the beauty of our gardens.

his services in public life bear him honorable record. He was borne in Lancaster County, Pennsylvania, and he modestly writes of himself, "from my first recollections I was surrounded by the finest fruits in the neighborhood, Apricots, Prunes, Gages, choice Cherries, Pears, Apples and Peaches. So it is no wonder that I was early imbued with a love of fruit culture." In 1836 his father and family moved to Cumberland County, Pa., where, after a few years, our subject, with his younger brother, started a nursery. In 1845 he left home and commenced a nursery of his own, near Leb-

anon, Pa., and there he commenced to bring out new fruits. The first was the Naomi Strawberry, which enjoyed celebrity in its time. After this he raised and introduced the Louisa, the Martha, the Eva, the Black Hawk and the Young America Grapes. Martha was considered the best of the lot, and the exclusive right of it was sold to Rev. J. KNOX, of Pittsburgh, Pa., for five hundred dollars. It soon became so popular that a gentleman in Philadelphia paid Mr. KNOX a thousand dollars for a thousand plants of it. This is still one of the most popular of the white native varieties. Eva also enjoys a fair reputation. About seventeen years since, Mr. MILLER removed from Sedalia, Missouri, where he had been residing for some time, to Bluffton, in the same State, and there commenced the business of raising fruit for market. About eleven years since, while plowing a piece of sod in his orchard, "I turned aside," he writes, "to avoid covering up a seedling Strawberry plant, the first Captain Jack. Its history is well known, but it may not be known that it never brought me in much money, except by selling the fruit." While at Sedalia, some seedling Strawberry plants that had accidentally come up in several places were taken up and set in the garden. One of these which was carried to the new home, proved to be a "splendid berry," using Mr. MILLER'S own language. Mr. M. sold some plants of this variety to C. A. GREEN, of Clifton, N. Y., by whom it was named James Vick, and introduced to the public. Up to this time this variety continues to bear the test as a remarkably healthy and vigorous plant, producing an immense number of good or medium berries of fair quality. Its vigor and productiveness promise to make this a leading market variety.

Mr. MILLER has now another variety of Strawberry, procured in a manner similar to the last, which he is now testing, with much promise. He has named it Daisy. Mr. M.'s long experience with plants apparently enables him to perceive good points in them by their foliage. In writing to us, last September, Mr. M. gave some results of fruiting Daisy, last summer. "A row of it one hundred feet long yielded eighty-six quarts of splendid good berries, about equal to Manchester in size, while Manchester and Big Bob

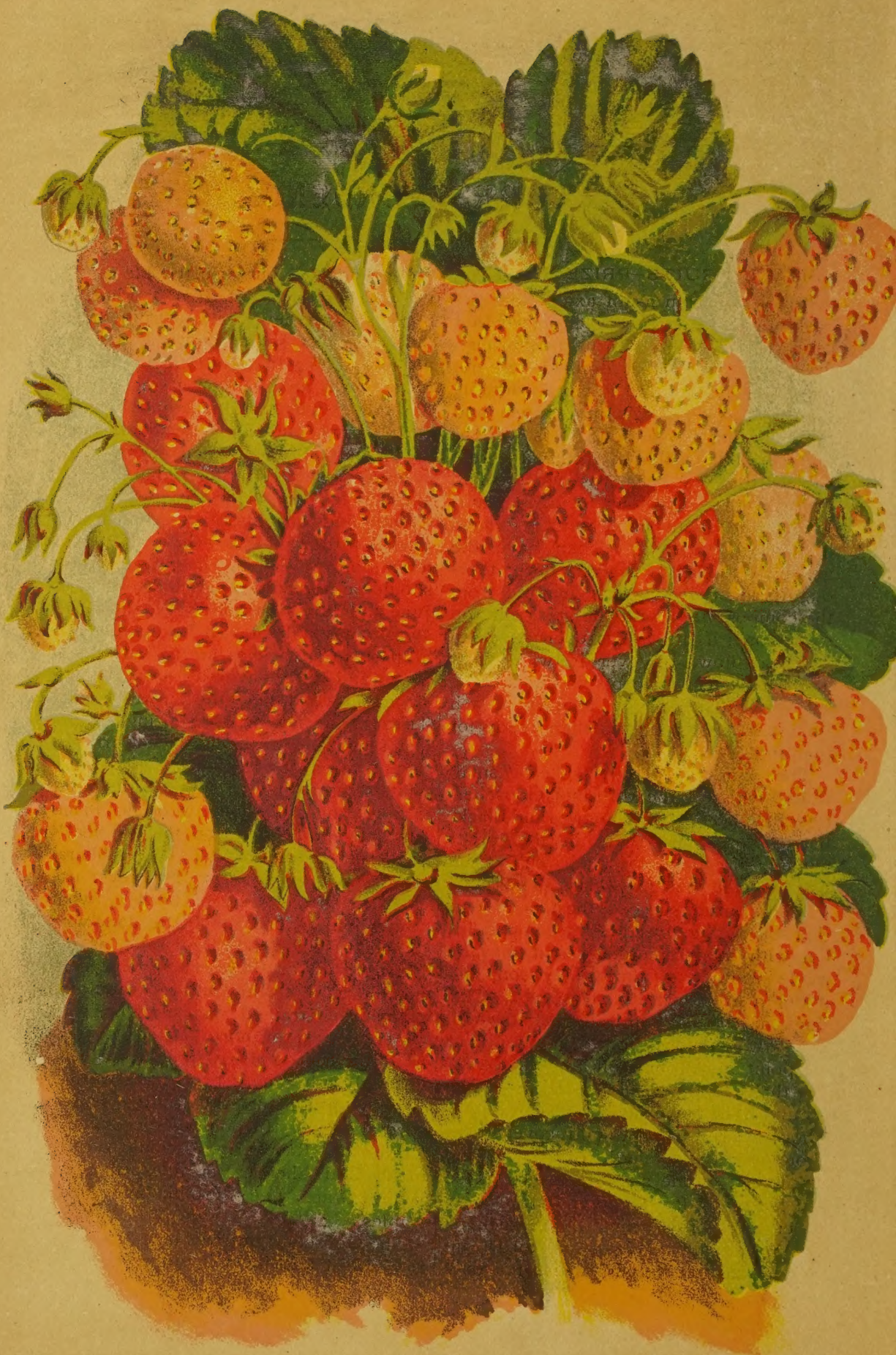
only gave fifty-four and fifty-five quarts respectively, all having the same chances, and not more than eleven months after being planted. During the hot, dry weather, Manchester and Big Bob had to be well nursed to keep them alive, while Daisy never flinched, without being watered, in the same bed. So, you see, I have not done with new fruit yet.

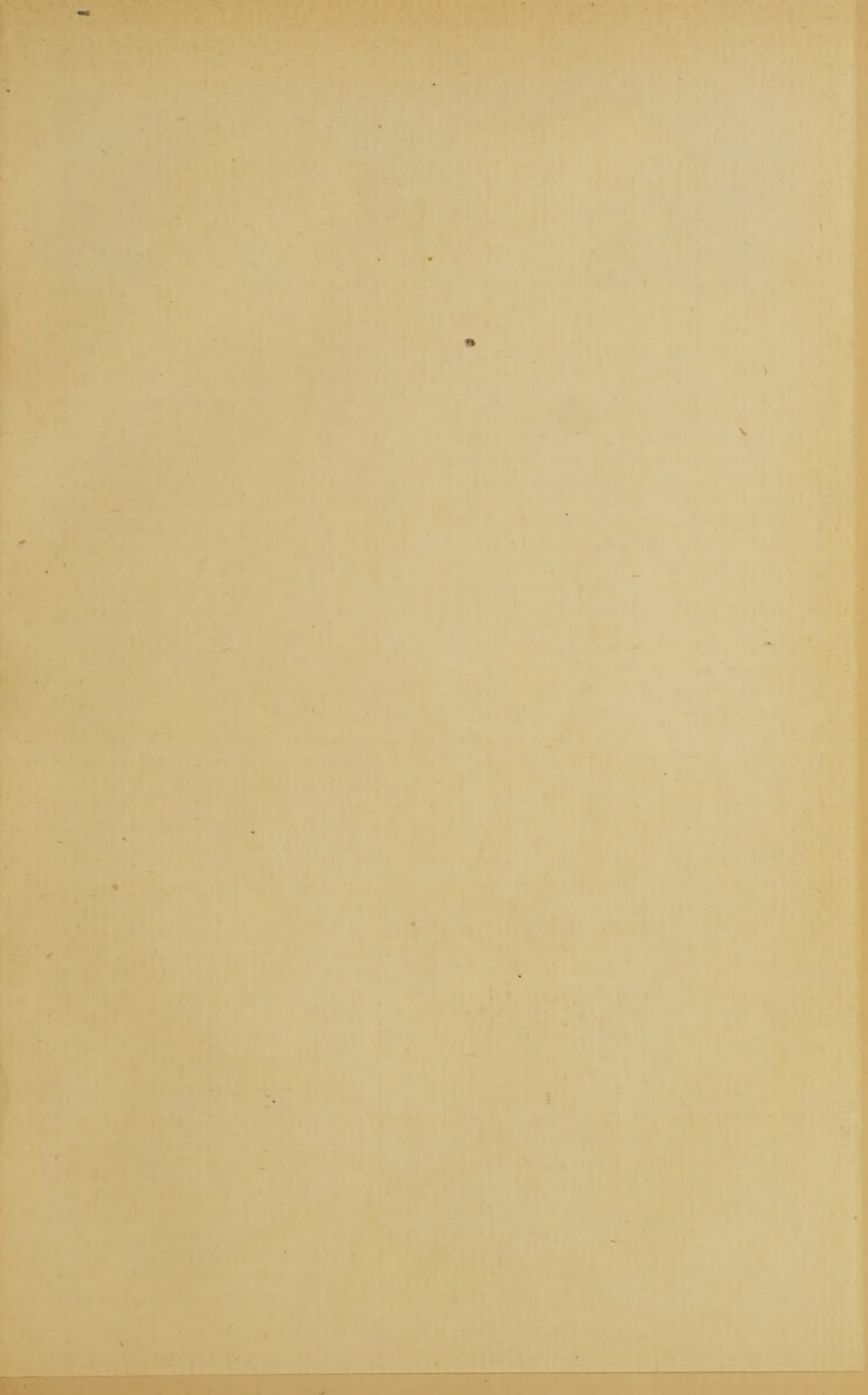
"A Grape that has been overlooked by the few who ever had it, will sometime in the future attract attention. Bunch very large, berry large, oval, black, no pulp whatever, but, like a Sweetwater, all juice, which is sweet, spicy and rich. Vine perfectly hardy, and as vigorous as a Clinton. For three years the foliage has been quite healthy. The fruit is freer from rot here than the Concord. Another year more and if it fills the bill I will send it out. Newark is its name. Where, or by whom, it was originated I have failed to learn."

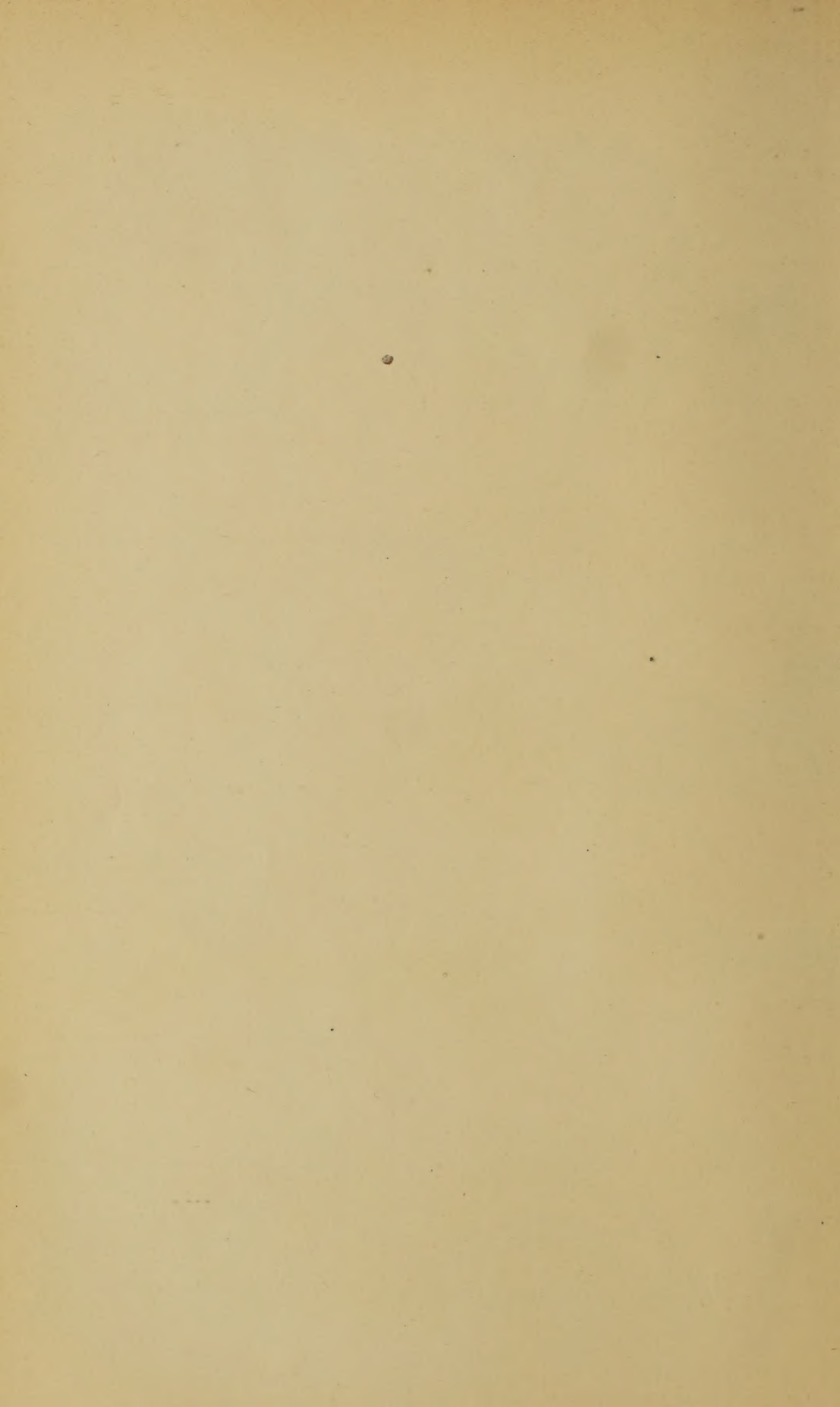
Mr. MILLER may be assured that horticulturists throughout the broad land by whom his reputation is known will desire that he may long continue his useful course, and that he may have no fear for his good name when judged by his fruits.

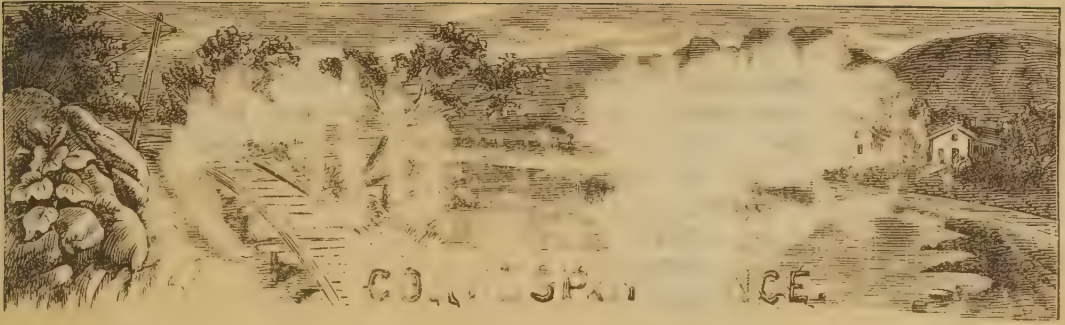
LADIES IN COUNCIL.

The time is near at hand when our agricultural and horticultural societies, all over the country, will be holding their annual meetings, and appointing committees for the year. Many of these societies are in ruts that are already deeply worn, and their usefulness and influence are waning. Many of these allow practices on their show-grounds that are morally far below the standard of their membership, and which the officers are continually obliged to apologize for, on the ground that in no other way can they raise a sufficient revenue to pay the necessary expenses of the shows. As a probable improvement upon this condition of things, we ask that the lady members be associated on the standing committees as far as practicable, but especially on the executive committee, and the committee for the preparation of the schedules or premium lists. It will be proper either for the ladies or the gentlemen to introduce this subject and propose a change. The effect will be wholesome.









SMALL FRUITS—PRIZE ESSAY.

It may be taken as an axiom that the basis of all successful cultivation, whether in a garden or on a farm, is thorough drainage. For, when drained, soil not only dries quicker and is more workable in wet seasons, but is more open and moist during dry seasons, it is warmer and workable earlier in spring, and less subject to early hoar frosts in the fall. Therefore, the first thing to do in planting a garden with small fruits is to have it properly drained. Then have the ground trenched two grafts deep, thoroughly incorporating the manure from the compost heap with the soil, from top to bottom; if the soil is open so as to admit a plow, go over it twice; first about eight inches deep, and then use the sub-soil plow, heavily manuring each time, and the ground is then ready for planting.

The kinds generally called "small fruits" embrace the Currants, Gooseberries, Raspberries, Strawberries and Blackberries. Taking them in the order named, directions for their cultivation will be given in as few words as possible.

The Currant succeeds best in a loose, rich soil, well exposed to the sun and air, but with moderate attention it may be made fruitful in almost any soil, and under a great variety of aspects. Cuttings may be made of well-ripened wood, about twelve inches in length, taking out the point and rubbing off all eyes, except the three top ones. Place these in the ground base downward, in a slanting position, nearly upright, and cover them about half their length and tread firm. At the end of the season's growth these will be ready for planting out. Never, under any consideration, plant suckers, and never allow plants to throw up suckers, as it materially affects not only

the fruitfulness, but also the life of the bushes. Trees grown from or renewed by suckers are never half so fruitful, and the fruit never so fine, and the trees do not live so long in a fruitful condition, as those grown and kept on a single stem. Planting may be done either in the fall or early spring, but fall is decidedly best. Give plenty of room and an airy position, at least five feet apart for red and white, and six feet for black varieties. I frequently find Currants planted under fruit trees, but the fruit so grown is always inferior both in size and flavor. Currants should be pruned twice each year, first in June and July, thin out the young wood so as to admit light and heat equally to all parts of the bushes, and you will have larger and better flavored fruit, and riper, stronger wood for the next season.

Then, in the fall or early spring, tip the last season's growth of Black Currants, and shorten back that of red and white so as to induce spurs, as the fruit is borne on the young wood in Black Currants and on spurs on the last year's growth in red and white. Give a liberal top-dressing every spring, but never use a spade on the Currant border; what cultivation is done should be done with the fork, scuffle, hoe, and rake, as the Currant roots are always on the surface. Some bushes of white and red should be planted and trained against a fence with an east, west or north aspect, so that when the fruit is nearly ripe they can be covered with canvas or other covering, thereby prolonging the fruiting season several weeks. In point of succession it follows the Raspberry. I would recommend Red Cherry, Versailles, Victoria, White Grape, Lee's Prolific and Black Naples.

The Gooseberry thrives best in a deep, rich, moist alluvial soil, but it must be

thoroughly drained. The Gooseberry, like the Currant, will adapt itself to almost any situation or circumstance with a little care. It is propagated in exactly the same way; the young wood should be thinned out in June and July, the plants kept free from weeds, and the young growth shortened back, and all old, weak wood taken out in fall or early spring; a liberal top-dressing should be forked in in the spring, and with this care I can insure a good crop of fruit every year. The summer thinning of the wood, letting light and air into the bushes, keeps the mildew in check and gives better fruiting wood for next year. The greatest enemy of the Gooseberry and the Red and White Currant is the larva of the *Geometra* (*Abraxis*) *grosulariata*, commonly called the Magpie or Gooseberry moth. If not attended to as soon as hatched, in one week the worms will strip the whole of the leaves from the bushes; there are several specifics for destroying them, but I have found none so good or so easy to apply as the powder of the White Hellebore. As soon, therefore, as the leaves are fully expanded get the Hellebore, and not wait until half the leaves are eaten and then waste further time in procuring it. As soon as the insects are perceived at work put one pound of Hellebore into six gallons of warm water and thoroughly syringe the trees. I formerly used the powder in a dry form, but I find it is not nearly so effectual as in water and applied with the syringe; this will completely exterminate them, and if done about three times in the season there will be very little trouble with them. The Gooseberry comes in with the Currant. I can recommend Lancashire Lad, Crown Bob and Harrington Red for red varieties; Golden Gourd, Yellow Ball and Golden Duckwing for golden; Green Walnut, Pitmaston's Green Gage and Hepburn's Prolific for green ones. Downing's and Smith's Improved, in some localities, do better than the English varieties, but I have most of the above named at Toronto, and they are perfectly hardy, and with my way of pruning never trouble me with mildew.

The Raspberry is a favorite everywhere, and of such easy culture that it should find a place in every garden, coming in as it does just when we are lament-

ing the end of the Strawberry season. When the air is hot and parching I know of no greater treat than a dish of Raspberries. The plant is propagated by suckers, which can be planted either when they are young and growing, or in fall or early spring; but, if planted young, they ought to be taken up with as much earth as possible attached to the roots, put in their places at once, and well watered. Three or four suckers are generally put to a stool. The Raspberry likes a position and soil exactly like the Gooseberry. In a small garden the plants make a very neat border to walks, but in a garden of any size they should have a quarter to themselves. I advo-



RASPBERRY CANES TRAINED TO STAKES.

cate planting the stools four to five feet apart, according to the varieties; for strong, long-caned varieties, five feet, and for others, as Franconia and Brinckle's Orange, four and a half feet. Drive a strong stake exactly in the center between the two stools, and train them, as shown in the accompanying diagram. This mode of training has several advantages to recommend it; in the first place, it gives the canes an equal chance, thereby insuring a greater number of branches and, of course, a greater crop. By the old mode of bunching them round a stake in the center of each stool, one-half the eyes had no chance to break at all, and even then the branches were so thick that there was very little chance for each to get its proper quantity of light and air; another advantage of training fruiting canes away from the stool is that the young growth has a much better chance to grow and ripen, hence, better and harder canes for next year are produced. It is a ruinous policy to dig among Raspberry canes with a spade; but if top-dressed in spring, kept clean in summer, pruned, and well forked over in fall, the crop will be splendid. Very many gardening authorities affirm that the Raspberry should be taken up and

the plat replanted at least every six years, but I do not agree with them. I think the Raspberry rejuvenates itself every year, and will so long as it has proper attention. Any observant cultivator must have noticed the tendency of the Raspberry to push its best canes up on the south and southeast sides of the stools, and by careful attention to this trait, in pruning, you will find that in six years your stool will be two or three feet south of its original location, and the old stool done away with altogether. About eight strong canes is generally considered enough to leave to a stool. I would recommend the following for garden use as being hardy and productive: in reds, Franconia, Brandywine and Cuthbert. Brinckle's Orange, for a yellow, is hardy with me here and a prodigious cropper, fruit large, firm and most delicious. Souhegan, Gregg and Mammoth Cluster for blacks will be found hardy and productive kinds.

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the season and never go back. The Strawberry should be planted two feet apart between the rows, and about eight inches between the plants; these, the year after planting, will give an abundant yield, and in spring should be top-dressed with a mixture from the compost heap and rather more than half decayed barn yard manure. The compost and the decayed parts of the manure will feed the plants and the littery parts of the manure drying will not only act as a mulch by keeping the sun from drying the ground, but will also keep the fruit and flowers clean during heavy rain. When the fruiting season is over, this long stuff can be raked off and carted with other garden refuse to the heap, and the rest of the stuff forked in. The plants should be encouraged to make good strong crowns for next year's fruiting. If the weather is very dry during June, when the Strawberries are coming into flower, give copious waterings; far better leave it alone than half do it, and if the ground gets two or three good floodings, the top-dressing will keep it moist most through the fruiting season. Every third year, instead of digging the plat up and planting another, train the runners into the middle between the rows and peg them down. With the liberal top-dressing we have given the soil, here will be just the thing for a new bed, and as soon as the young plants can do without their fostering mother the old ones can be cut off and carted to the heap aforesaid, some of the decayed parts of the heap brought back in their place and dug in, and by the fall we will have a flourishing bed of fine, strong crowns that will yield a splendid crop the coming season. And this may be repeated every third year, renewing the ground and plants in the same manner. This is a way of my own, made public in this paper for the first time, and I claim that it is far the best method practiced for renewing the Strawberry bed. In new varieties, James Vick, Warren, and Jersey Queen are about the best, and in the old standards Crescent, Duchess, Bidwell, Wilson's Albany, Charles Downing, Sharpless, Glendale and Jucunda will be found good croppers, hardy, fruit medium to very large, and early, medium and late varieties. I would have added Longfellow, but it is very shy in many districts. In planting, care

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should be taken to mix staminate and pistillate varieties together, otherwise a crop cannot always be secured.

A good way to grow Blackberries is to train them as I have recommended for Raspberries, around the Strawberry quarter. I can assure you they are a great protection, for any one who once tries to push through them will come off with the loss of some part of his garments. I have the Lawton planted in this manner, around one bed, and I lost very few Strawberries there.

And now, a few words about the compost heap mentioned several times in the course of this paper. In every garden there should be some corner where all refuse from the house and garden and other places can be thrown together; all the grease and swill, the cleanings of water closets, leaves and rubbish of all kinds should be put together, and every two or three months a quantity of animal manure from the stables added, and the whole mixed with a little air-slaked lime, and thoroughly turned over, the soil raked up with the weeds and a little added. Sulphuric acid will fix the ammonia and other valuable salts. Add all the leaves that can be got together in the fall, and some more manure, and you will have a great heap of valuable fertilizing material for any crop, but invaluable for small fruits.—W. H. WADDINGTON.

CALIFORNIA.

So far as vegetation is concerned, California is a wonderland, a veritable fairy land. It reminds one of the work of the magicians of India. Perhaps you remember that they take a pot of earth and plant a seed, and cover the whole with glass. Then, while one sits watching, the seed sprouts, begins to grow, attains full size, blossoms, the blossoms change to fruit and the fruit ripens, and some is given the lookers-on to eat. Here, God is the great magician, and the wonders He works are marvelous.

You have flowers in the summer, we have them all the year. Last winter was unusually cold, and the starting Rose buds and tender plants were killed; but *Pyrus Japonica* went right on blooming in the most complacent manner. The *Laurestinus* kept its beautiful buds, and it seemed impossible that bushes could be so full of clusters of buds, and the

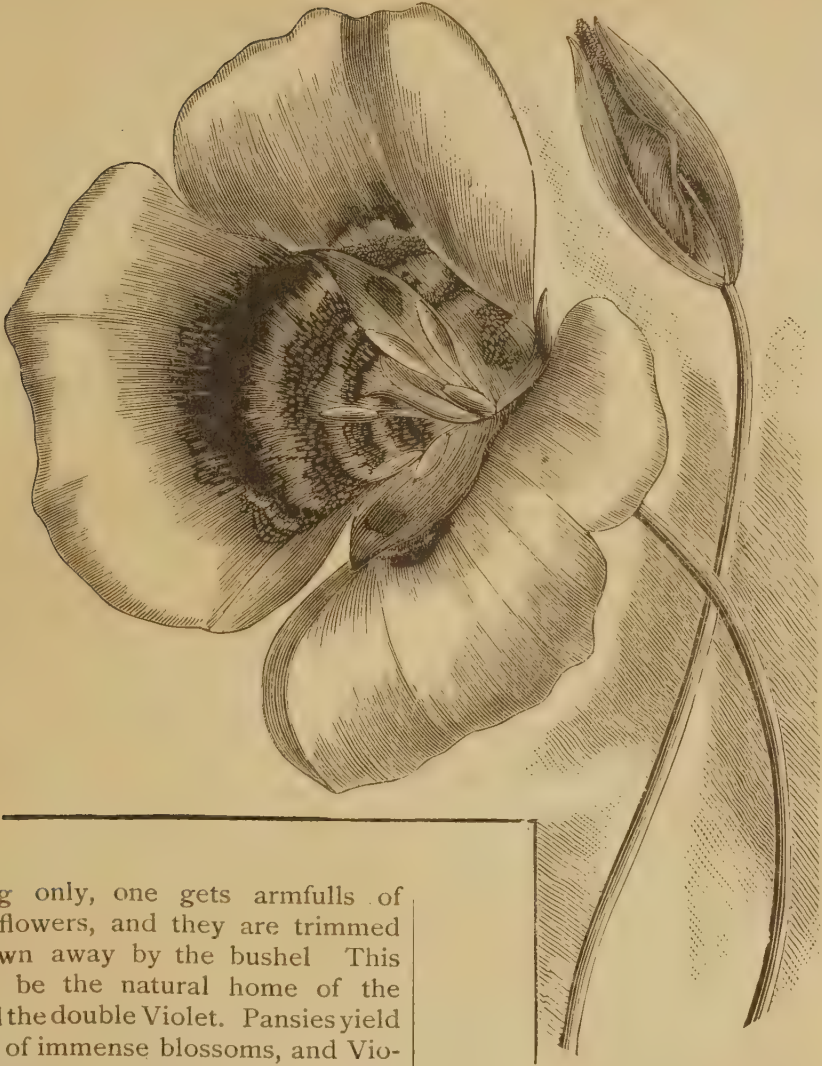
double Violets and Vincas blossomed in a way that showed supreme contempt for frost.

There has not been a day since I came, a year ago, that shrubs have not been in blossom. There is a very great variety, many kinds of which I never heard of before, and they bear a wonderful profusion of blossoms. Oleander, pink, cream and white, abound, and often grow to be trees. Magnolias with their long, glossy leaves, and large, cup-shaped, magnifi-



ESCHSCHOLTZIA CALIFORNICA, OR CALIFORNIA
POPPY.

cent blossoms are here, and Acacias with red and yellow blossoms that look like tropical birds, and Crape Myrtles, sometimes almost trees, with myriads of their delicate blossoms, and Pomegranates flowering and fruiting, and Orange and Myrtle shrubs full of loveliest white blossoms and afterwards large blue seeds. English Ivies are common out-door vines, climbing over porches or wood houses, where I know of one, at least, with a stem as large as a man's arm. Tea Roses grow like Perpetual Roses east. My neighbor has bushes two years old, six or eight feet high, and two or more in circumference, and full of immense great blossoms and buds—*Jacqueminot*, *Lamarque*, *Marechal Niel*, *Bon Silene* and others. Two *Lamarque* Roses cover the piazza, and bear thousands of blossoms.



CALOCHORTUS VENUSTUS.

By asking only, one gets armfuls of choicest flowers, and they are trimmed and thrown away by the bushel. This seems to be the natural home of the Pansy and the double Violet. Pansies yield hundreds of immense blossoms, and Violets hundreds of thousands, I judge. One lady, who has a fine garden, has all the beds bordered with six inches of Violets, which she thins out and throws away. A gentleman living near, dug up and threw away rods of variegated Vinca, which you florists sell for twenty cents a small plant. It blossoms abundantly all winter here, with beautiful Myrtle-shaped blossoms as large as a half-dollar.

Another fine garden is bordered with double Daisies of various colors. Calla Lilies are garden plants here. Chrysanthemums are as plentiful as—I can't think what—say Phlox, with you, and of great variety of size, shape and color; some I really thought, at a little distance, must be Dahlias.

And then the wild flowers! Language would fail to do them justice, either in their beauty or abundance. Some of them, notably the Lupins, grow by the

acre. The ground will be blue as far as you can see it. There is one whose name you will know better than I who do not understand botany, but I believe it is *Calochortus*. It is a translucent white, oval, about an inch in diameter, and the most fairy-like, lovely thing you ever dreamed of. The California Poppy is as plentiful as your Dandelions, and as pretty as a Tulip. And, by the way, there are no Dandelions here.

During all the spring months one can wander over the hills and gather bushels of wild flowers. Larkspur is wild here, and a vine that looks like the perpetual Sweet Pea. A new dictionary ought to be issued containing a fresh supply of adjectives to apply to California flowers. I will go by a garden, sometimes, gazing as though I had never before seen a

flower, and feeling confident I have looked at every plant in it. The next time I pass, it will seem to me that I never saw one of them before.

I can't understand why any one who can come here is willing to remain back in "the States." I would rather live here and be poor than there and be rich. In addition to all charms of sunshine, and atmosphere, and landscape, and vegetation, there are never thunder storms, cyclones, whirlwinds, or blizzards. And, can you imagine it, people don't know what a Potato bug is. "Where ignorance is bliss, 'tis folly to be wise." We had four months of clear, sunny days, not one rain storm. Gardens are watered by irrigation or through hose.—ANNA WOODRUFF, *Auburn, Cal.*

A TRIP TO THE SEA SHORE.

Fate, in the form of a protracted illness, having decreed that one of our family should follow the train of visitors to the sea shore, last summer, the chief members of the household, after many and prolonged discussions on the subject, came to the unanimous conclusion that they would make a reality of one of their day-dreams by visiting the island of Nantucket. Visions of "shells of the ocean" and an unknown flora to be discovered haunted at least one aspirant for seaside pleasures; but, unfortunately for floral investigations, the volume on botany which was to be taken was ignominiously rejected by the practical member of the family and left at home, a fact which called forth many lamentations and reproaches after our arrival and consequent discovery of the various wild flowers which abound on the island.

The prospect of even a short trip is enough to demoralize a family which rarely leaves the shadow of the roof-tree, but as all things earthly have an end, even the delights of packing must terminate, and one bright Monday morning we found ourselves on the Troy and Boston train en route for Nantucket. After a short delay at the busy manufacturing town of North Adams, we left the depot, and in a few moments were in the depths of Hoosac Tunnel. Though the train is but a short time passing through the mountain, it seems quite long enough, and it is with a feeling of relief that one sees the burst of light as the engine

rushes out into the sunshine and fresh air on the eastern side of the mountain. Leaving the tunnel in the rear, we follow the course of a river, the Deerfield, I think, for a long distance, and as we look down at the rocky stream beneath and at the steep mountain side, out of which the road is hewn, we realize, to some extent at least, what a Herculean task it must have been to build the road over which we are now gliding so smoothly.

Although the towns are quite numerous, and many of them very pretty, along the route, it seems strange to see in the very heart of the Eastern States such vast tracts of uncultivated land; much of it covered with brush and young trees, and one is led to wonder if all that territory is unfit for cultivation owing to poverty of the soil. After about two hour's delay in Fitchburg, during which we walk about and explore the town a little, we take the Old Colony cars for New Bedford, and find as we are leaving Fitchburg that we narrowly escaped the chance of visiting an inviting looking greenhouse, situated provokingly near the depot. We forget the greenhouse, however, and employ ourselves in looking out of the window at the varied and beautiful scenery of Central Massachusetts, and so the long summer afternoon wanes, and after another change of cars at Trenton we are off again, speeding on to the ocean toward which our thoughts have so often turned during the last few weeks. We "consider the Lilies of the field" in our flight, as they flame out among the grasses and bushes beside the track. Interest in them deepens as the number increases, until, at last, as the train flies on with greater speed, they look like a long line of fire gleaming out in the fading light. Just as the day is closing we arrive at the whaling port of New Bedford, but are too late, of course, for anything but a limited view of the quaint old place. After a hurried breakfast, the next morning, we rush to the wharf, where we find the steamer Island Home waiting for her load of freight and passengers before taking her daily trip to Nantucket, and in a few minutes we are really out upon the broad Atlantic. For some of us this is the first salt water trip, in fact, the first time we ever saw the ocean, so the beautiful scene spread out before us as the boat

steams out of the harbor has the added charm of novelty. On our way we touch at Cottage City and Oak Bluffs; at one of these places the steamer *River Queen* is waiting. This steamer has a history, as it is said that she was ABRAHAM LINCOLN's dispatch boat during the war. She now, however, follows a more peaceable calling, as like the *Island Home*, she carries passengers between New Bedford and Nantucket.

Martha's Vineyard seems to be a sort of seaside pilgrim's paradise, judging from the immense hotel and numerous gingerbread houses which adorn its shores, and from the number of people who seem to be coming and going on the boats. At last, we are off again, and leaving the Vineyard we sail away out upon the shining waters until there is little or no trace of land to be seen; at last, the low shore of Nantucket appears in the distance, just above the water, and after much steering among shoals we round Brant Point at last, and are in the harbor of Nantucket. We have very little time, however, to look about this curious old town, to-day, as our voyage is not ended, so we take our places in the little yacht *Lillian*, and after about an hour's sail find ourselves at Wauwinet, which is near the head of the harbor, and where we all are to picnic for a few weeks.

It would be rather severe on the imagination to call Wauwinet a village, as the only dwellings there are the Wauwinet house, a summer hotel, the *Sea Foam House*, and a few cottages in a greater or less state of dilapidation; but being near the head of the harbor, with the open sea a few rods away, it is a great place of resort for those in town who wish to have a pleasant sail upon smooth water and a shore dinner at the Wauwinet House. The yacht *Lillian* and the toy steamer *Island Belle*, make two trips a day between Nantucket and Wauwinet, so on pleasant week days from the arrival of the morning boats until their departure in the afternoon, this part of the island presents a very lively appearance. 'Sconset, a queer little village a few miles away, also contributes her quota occasionally in the shape of sundry loads of pleasure seekers, who congregate at the hotel, or distribute themselves about with baskets, under the impression that they are having a "squantum," that being

the vernacular for picnic. In the evening the place presents a very different appearance, being usually deserted by nearly all except the few who have, like us, chosen it for their abiding place for a season, and who, in order to thoroughly enjoy themselves, should be able with the poet, to say,

"Good bye to pain and care! I take
Mine ease to-day.
Here, where the sunny waters break
And ripples this keen breeze, I shake
All burdens from the heart, all weary
Thoughts away."

—MRS. H. R. L., *Hoosic, N. Y.*

THE SILVER THATCH PALM.

The Silver Thatch Palm, *Thrinax argentea*, is a very pretty and useful dwarf Palm, attaining in its native country a height of from five to fifteen feet. It is a native of the Island of Jamaica, where it is to be found growing on rocky hills, as well as in low, moist places, even down close to the sea. It is described as having a slender trunk, seldom exceeding five inches in diameter, which is always well furnished with leaves in the form or shape of a fan, and which are sustained by slender foot-stalks. It also bears an abundance of berries, which are much eaten by both birds and beasts when in season; the leaves cut before they expand are used for the manufacture of Palm leaf hats, and the foot-stalks, split and pared, are used to make baskets or ropes when strength and toughness are desired. The popular name, Thatch Palm, has been given it from the fact that the leaves are much used for thatching outhouses, etc.; for this purpose they are often used, but they are very apt to harbor vermin. The trunks are frequently used for building piles and other work near the sea, as they stand the water well, and are not destroyed by insects or other destructive pests. This pretty species is often met with in the greenhouse, but in its small state it is well adapted for cultivation in the window garden, for it is a Palm that is easily cultivated. During the summer give it a partially shaded situation, and an abundant supply of water, both overhead and at the roots, while during the remainder of the year it can be fully exposed to the sun. During the winter water moderately, yet do not let the soil become

dust dry, and keep the foliage clean by sponging it off occasionally with clean water. As usually grown Palms are generally starved, and as a consequence they make but little growth. Repot them early in May in a compost of two-thirds good fibrous loam and one-third well decayed manure, and be careful to give good drainage, as this is a most essential point. In repotting be very careful not to injure the thick, fleshy roots, and if it is necessary the plants can be



THE SILVER THATCH PALM.

put back into the same pots, after some portion of the old soil has been removed; but as a general rule it is advisable to place them in a pot a size or two larger, and with a little care and attention they will then grow luxuriantly and acquire a splendid brightness of foliage, thus forming excellent plants for the decoration of the window garden or greenhouse. Propagation is effected by seeds, but in the hands of amateurs and non-professionals this is rather a tedious affair on account of the length of time the seeds require to vegetate, as well as the slowness of growth of the young plants; but good strong plants can be obtained at a moderate price of any of our principal florists. I should have mentioned the fact that this *Thrinax* should be given a winter temperature of from 55° to 60°.—

CHAS. E. PARNELL, *Queens, L. I.*

MELOTHRIA PENDULA.

Highland Park, though thirty miles distant, is a beautiful and thriving suburb of Chicago, on the Chicago and Milwaukee railroad, the seat of a popular educational institution and the home of numerous men of means doing business in the great city. Among those seeking rural homes as a relief from the smoke and din of thronged thoroughfares there is very naturally a quiet, healthful emulation as to the beautiful and inviting appearance of the residence grounds, and a stimulated attention to the possibilities of horticultural decorative art. To secure the best landscape effects, to select the best trees and shrubs, to have the finest beds and the neatest lawn, to supply the table with the freshest flowers, and to make and keep the best winter garden, these are things considered worth striving for, though at the expense of much searching in books and florists' establishments, of money in purchasing, and of constant care and watchful labor.

Conspicuous among the homes of Highland Park is that of S. W. MILLARD, Esq., made so by the cultured taste and careful attention of himself and wife, and presenting in many ways the varied attractions, out doors and in doors, enumerated above. There is no purpose here of describing the place; but so much has been said to show the appreciation of ornamental plants possessed by the owners and the enthusiasm with which any thing new and excellent for its purpose might be greeted. Imagine then the attention given a slender little vine which spontaneously sprung up in a stand of soil in the bay window, among plants so different in character as to make the stranger conspicuous in the way of variety. "What is it?" "Where did it come from?" No one knew. No Chicago florist had such a plant, nothing like it was to be found in the catalogues. In the meantime, the graceful seedling reached up and out its thread-like stems, and its unbranched tendrils rapidly coiled themselves around the objects within their reach. Up, up, by the aid of provided supports, clambered the numerous parts of the elegant vine, rich in foliage and splendid in habit, and reaching the ceiling its little branches radiated over a horizontal trellis, a canopy of light-flecked green. The flowers are inconspicuous,

being very small and an impure white, adding very little either by appearance or fragrance to the beauty and attractiveness of the vigorous vine, but in the mass of foliage, luxuriant and beautiful, they are scarcely missed.

Having served as a splendid adornment of the dining room nearly a year, the admiration of many and the enigma of all, the aerial part of the plant died, and its race was supposed to be run; but on examination the roots showed every sign of vitality and were carefully preserved. After a season of rest, new shoots appeared, and the petted vine soon re-asserted its claim of beauty and interest, and people puzzled themselves anew as to its name and origin.

Finally, appeal was made to a fortunate visitor, who happened to be better able to guess botanical riddles, and after considerable teasing the minute flowers yielded up the secret of their classification, and the name, *Melothria pendula*, was found in GRAY'S Manual, where the plant is said to occur in "copses, Virginia and southward." The other part of the problem, how it came to be where now described, is still a mystery; but the stranger is such no longer, and should not be in many another bright and happy home. Who has heretofore made its acquaintance?—T. J. BURRILL, *Champaign, Illinois*.

THE MOUNTAIN LAUREL

In the November number some one asked for information concerning Rhododendrons. "The house where I was born" stands upon a broad upland that is known by the name of "Laurel Hill," because it was once covered thick with every species of Laurel. Looking from the front porch to the south the eye is cheered in winter by a chain of evergreen hills that owe much of their beauty to this shrub.

The handsomest variety that I know of is the tall Mountain Laurel referred to in a recent number of this MAGAZINE as *Kalmia latifolia*. It generally grows to the height of twenty-five or thirty feet in its native woods, and in May or June produces cone-shaped trusses of flowers at the end of almost every twig. Their color varies from deep pink to pure white, and I have frequently seen a still more beautiful, purple variety which

grows high up among the mountains and which is often brought home as a great trophy by pleasure seekers. The flowers are odorless, waxy and delicate in appearance, and the single flowers generally measure one and one-half inches across. They are shaped like the Azalea, with the exception of the stamens and tube, which are not so long and are very sticky, for this reason "the natives" often use them as fly-traps. The leaves are oblong and rounded, soft and pliable when young, but grow harsh and stiff as they grow old, and when hunting among the bushes for *Arbutus* and *Azalea*, I have frequently noticed on my dress and gloves the white, dust-like substance which comes from the leaves, so I do not think the "white, dust-like spots" mentioned by a writer as covering her plants can be bad symptoms. As for the bark getting "brownish black and dry," that is the natural color here, and of all other full grown specimens of the *Rhododendron* which I have seen.

The Laurel hardly ever grows perfectly straight, but twists its branches into every curious shape imaginable, and these dark brown, knotted, crooked and curved stems are much used here, where it is very common, for making rustic vases, chairs, baskets, &c. The plants do not require a very rich soil, for I notice that the hills on which they grow best are nothing but common clay with crust of leaf mold. We have a great many varieties of Laurel here, and many of them vie in beauty of foliage and flowers with the one which I have described, but my letter will not hold a description of them all.

—KATE ELLICOTT, *N. C.*

BLANCHING CELERY.

I like your MAGAZINE very much, and think it will be a benefit to all cultivators of flowers and vegetables. In the October number I saw how Mr. HASKINS blanched his Celery. I tried it, but it does not prove true. The best way I have found for late plants for winter is to set them in the garden in August, and earth up as they grow, and before frost plant them in a box close together, and pack ground close around them, and keep in a light cellar. In this way we have plenty of good, tender Celery all winter. —MRS. E. M., *Strasburgh, Ohio*.

WATERFALLS OF YOSEMITE.

It has always been a mystery to me why people will permit themselves to be so hurried when they visit the Yosemite valley. The majority of tourists stay about three days, but occasionally an appreciative soul may be found who tarries for a week. When one considers the outlay of time, strength and money necessary to reach the valley it seems a pity not to spend a little more and make the trip a success, the remembrance of which

These hasty visits usually afford a trip up one or two trails, a drive to Mirror Lake, and possibly another about the valley; but there is no time for the gentler attractions of Yosemite, for delightful strolls through dewy meadows or fragrant forests, for dreamy hours by the river, for blissful moments of waiting in the spray before the Pohono Fall while rainbows climb higher and higher. These and many other joys are only for the true lover of nature who gladly turns his back



VIEW IN YOSEMITE VALLEY.

will be a constant source of enjoyment, instead of carrying away a vague, confused impression of huge rocks and roaring cataracts, with no definite conception of any thing except that one has "done" it. Doubtless, the agents of the stage company, in San Francisco, are accountable for many of these hasty visits. Their object is to persuade people to patronize the stage lines, and one of their inducements is that the trip will take but a few days. I met a young English lady in the valley, last spring, who was sorely regretting her short stay. She said the San Francisco agent told her that two days would afford ample time to see the whole valley. She was justly indignant with him, but was obliged to leave at the close of the prescribed time, as plans had been made to join others in San Francisco, who were waiting to proceed on their journey across the continent.

on the haunts of men to revel in the wonders of this wonderland.

In early spring time, when the snows on the adjacent mountains begin to melt, there are formed innumerable small cascades and waterfalls which disappear later in the season. One of the most beautiful of these is the Virgin's Tears Fall, nearly opposite the Bridal Veil, where a slender stream makes a plunge of more than a thousand feet. It exceeds the celebrated Staubbach Fall, of Switzerland, in both height and volume; but visitors, with consciousness dazed by the effort to form a just conception of the neighboring cliffs and roaring cataracts, rarely speak of the delicate filmy flow as other than lovely. Down the opposite side of the valley stream the Bachelor's Tears, but these briny drops are proverbially inconstant, and rarely flow more than two or three weeks.

A most peculiar little fall plays over

the imposing crest of El Capitan, as if to invest that stern chieftain with grace in the eyes of his beloved Tissack, the Goddess of the valley. It twists and twirls, and some fanciful person has given it the name of the White Horse-tail Fall; not a graceful appellation, but one appreciates its significance while looking at the foam waving against the blue sky.

The melting snows of the mighty North Dome form the Royal Arch Fall, so called from flowing over the Royal Arches, massive semi-circles of granite that ap-

Across the valley, on the opposite wall, several cascades appear in succession, seemingly near Glacier Point. No hint is given as to where the stream leaps from the cliff above, and no one knows the point where it reaches the valley. So these charming cascades, visible about mid-way up the mountains, have been christened Conundrum Falls.

Another, which continues well into June, is known as the Sentinel Fall, and flows down the side of Sentinel Rock in a series of cascades. This is, excepting



NORTH DOME.

parently support the Dome. This fall is about two thousand feet in height, and always held a special fascination for me by reason of a peculiar movement all its own. The water seems to slip and slide down the rock from the top of the precipice to where it strikes the valley. I have watched it again and again, and the movement never varies. There is no swaying back and forth by the wind, as in the Upper Yosemite and Bridal Veil, no suggestion of pouring as in the other falls, but the same leisurely slide, so leisurely that at some points I could detect no motion till the sunlight glanced on the water. I missed this fall greatly when its fountains were exhausted. The immense overhanging arches always seemed incomplete after that little gliding stream ceased to flow down their strikingly marked surface.

the Virgin's Tears, the finest of the smaller waterfalls. The stream flowing from it is remarkably clear, even for these mountain waters. I followed it up for some distance, one day, clambering over the rocks in high glee, and occasionally coming upon a clump of Ferns in some sheltered nook, though it was pretty early for them, May 14th. A snow storm put an end to my climbing that day, but as I hurried back to the hotel I determined some time to make my way to the foot of that fall. None of the people at the hotel had ever been there, and the general opinion was that it would be impossible to make the trip. But I found a little girl, reared among the mountains and active as a squirrel, who had been to the fall several times, and offered to be my guide. But the fates were adverse to the undertaking, and it was not accom-

plished, though I spent over nine weeks in the valley; for other expeditions thrust themselves to the front, and each day seemed all too short for the demands made upon it. So, the Sentinel Fall trip, and several others of minor importance, are reserved for my next visit to Yosemite.—ALICE P. ADAMS.

WHITE PLUME CELERY.

I notice on page 376 of your December number, under the head of White Celery, your remarks in which you say that the variety described as Chemin's or White Celery will be offered next season in this country for the first time under the name of White Plume. While it is just possible that this sort may possess some characteristics of the White Plume, I think it is hardly fair to say that it is the same, from the fact that the origin of the two have been widely apart. The variety known as White Plume was originated at Newark, N. J., some four or five years ago, by one of the market gardeners there, from a "sport" from what is known as the Half Dwarf variety, and inasmuch as it has proved to be so well adapted to our climate, I think it would be much safer to use that in preference to the foreign variety until, at least, the latter has been tested. The White Plume will undoubtedly revolutionize the culture of Celery, as it will enable anybody, whether accustomed to grow Celery or not, to grow this variety just as easily as Cabbage, Lettuce, or any other vegetable. Wherever it has been exhibited the past fall it has been greatly admired. Not only is its flavor equal to that of any other Celery grown, but the great beauty of its white, feather-like foliage will make it one of the finest ornaments for the table. In fact, the leaves themselves are nearly as palatable as the stems, and for all kinds of salads they will, without doubt, be much valued. I have been an extensive grower of Celery and other vegetables for the past thirty years, but I have seen nothing in all that time which I consider of such great value in vegetables as this new Celery. I had some fears from its white condition that it would not keep as well as the green sorts, but up to this date, middle of December, it looks as if it might keep just as well as the other kinds. All that has been sold in the markets of New York the present season has sold at

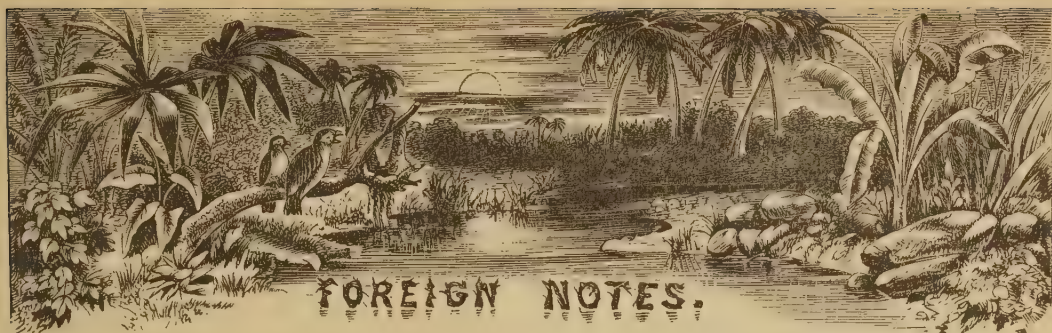
just about double the price of the older kinds, and when we consider that of all the other kinds of Celery, about one-third their value has to be paid for the labor of banking or earthing, which in this new variety is entirely dispensed with, it will be understood how very valuable this new vegetable is.—PETER HENDERSON.

CABBAGE—PRIZE ESSAY.

For growing the Cabbage to perfection a deep, rich, strong soil is necessary, especially for the later kinds, and the land ought, by all means, to be thoroughly drained. Good drainage, deep tillage and constant cultivation will ensure a heavy crop of Cabbage.

Presuming, then, that the land has been drained, it should be deeply plowed in the fall, so as to allow the frost to disintegrate its particles, sweeten it and render its inorganic properties fit for plant food; by this means it will also be suitable to work at least a week earlier in spring, as the frost will leave it quicker, and the superfluous water drain from it sooner. The next thing is to get good seed from true stocks. Good Cabbage seed is easily known by being plump, round, and of a dull, rich, purplish brown color. Old seed gets a whitish gray, and to obviate this the seed is sometimes oiled and run through a mill, therefore, I would always be shy of shining, oily seeds; but no reliable seedsman will send out seed that will not grow at least seventy-five per cent., which is a pretty good average for Brassica oleracea. Above all, get it true, as on this depends the success of next year's harvest; avoid cheap samples. A good, true stock of any seed will always command a good price, as the seed-grower has to exercise a great deal of care and labor in cultivating, rearing, harvesting and cleaning; good seed is always cheapest, whatever price it is.

For an early crop, Early Wakefield, Henderson's Summer and Winningstadt will be found good, reliable market sorts, and may be sown out of doors in the south-eastern States in the middle of September, but in the eastern, western and northern will require the protection of a cold-frame. But I very much prefer sowing in a hot-bed in January or February, giving all the air possible, and transplanting into other frames as the weather



FOREIGN NOTES.

ADIANTUM FARLEYENSE.

This, which is justly recognized as the queen among Ferns, deserves to have every attention bestowed upon it, for whether grown in small pots for table decoration, or as large specimens, it is a most beautiful and pleasing plant. Sometimes great difficulty is experienced in growing it to that size which gives it a massive appearance and brings out its full beauty, but this is generally owing to a mistaken idea that it requires a choice and specially prepared compost to grow it in. We have been able to grow it very successfully in the following manner: We simply use two parts stiff, red, turfy loam, using it fresh, just after the grass has decayed, shaking out the soil so as to render it open and spongy, and one part of charcoal, broken to about the size of a hen's egg for large specimens, and smaller in proportion to the size of the plants. Full grown specimens require repotting annually in March, after which they ought to be watered sparingly round the crown until they commence to grow. When the pots are full of roots stable liquid manure should be applied three times a week.—R. F., in *Gardeners' Chronicle*.

INTERNATIONAL FORESTRY EXHIBITION.—This is announced to be held at Edinburgh, Scotland, in the summer of 1884. The latest date on which application for space can be received is March 1st, next. The exhibition is open to exhibitors from all countries, and will include everything relating to forestry.

A USEFUL PALM.—Mr. FLETCHER calls attention in the *Journal of the Society of Arts* to the value of *Chamærops humilis* in rooms lighted with gas, the injurious effects of which it resists better than most plants.

EMPEROR WILLIAM AT ERFURT.

"We are informed," says the *Gardeners' Chronicle*, "that when the Emperor WILLIAM recently visited the horticulturally famous city of Erfurt, some street decorations of a novel character were carried out by the well known firm of J. C. SCHMIDT, who distributed over one thousand fronds of the Date Palm, *Phoenix dactylifera*, each frond from six to eight feet long, among the scholars of the high schools of Erfurt, who formed a line in one of the principal thoroughfares and waved the fronds as a salute on the approach of the Imperial carriage. His Majesty, we are told, was agreeably surprised at the novel and majestic character of this demonstration in his honor, and asked several questions on the subject. These Phoenix fronds are now largely imported into Germany for decorative purposes, and were used on a large scale, made up into various devices, in the decoration of the principal church at Potsdam for the ceremony of celebrating the four hundredth birthday of MARTIN LUTHER."

THE GRAVE OF DR. DENNY.

The friends of the late Dr. DENNY, who, by scientific skill and persistent effort, achieved so much in the improvement of Zonal Pelargoniums, have erected in the Ipswich Cemetery, to his memory, a polished granite memorial stone bearing the following inscription:

In Memory of
JOHN DENNY, M. D., F. R. H. S.,
Born at Ipswich,
Died at Stoke Newington,
London, 18th November, 1881,
Aged 62 Years.

This monument was erected by his friends in token of their esteem.

His life was spent in relieving the suffering poor.
His leisure was devoted to the promotion of scientific Horticulture.

MYOPORUM PARVIFOLIUM.

This is a greenhouse plant that has been cultivated in France and sold in the flower markets of Paris for the last twenty years. A writer in *The Garden* says, "I knew one Parisian market grower who always held a stock of some thirty thousand plants of it. It is, indeed, one of the plants most largely grown around Paris."



MYOPORUM PARVIFOLIUM—NATURAL SIZE.

It appears that this plant has only recently attracted the attention of English plant growers, and in this country it is apparently almost, or wholly, unknown. No reference to it, or description of it, can be found in horticultural works, except those of the French. And yet, according to the writer referred to, when well grown, the plants "have a most elegant appearance, and are entirely distinct from any other flowering plant I know."

The leaves and branches are dotted with crystal-like excrescences, which greatly add to its beauty. The plant is raised with a single stem supporting a large, many-branched, bushy head, from which fall long, "drooping branches a foot or so in length, and smothered with flowers." The flowers are white, and borne all through the summer.

Since writing the above, another and later issue of the journal mentioned has reached us, containing an engraving of this plant, which we have reproduced and here present. From the same source it appears that this plant is commonly grown in small pots for room and window decoration, and is most graceful as seen with its pale green branches drooping around the pot sides, and more especially so when the shoots are wreathed with sweet, snow-white blossoms. It is a New Holland plant, and will succeed well under the treatment usually given to hard-wooded greenhouse plants. Why have not some of our enterprising plant growers brought it to this country?

THE KUMARA.

Such is the name of an edible tuber that for an unknown length of time has been cultivated by the inhabitants of New Zealand. The *Gardeners' Chronicle* says, "The earlier voyagers, who paid attention to the vegetable productions, wild and cultivated, of New Zealand, speak very highly of this vegetable which was cultivated with great care by the Maories. It is the *Convolvulus chrysorrhizus*, of FORSTER, and probably only a race of *Ipomœa Batatas*." It states that Sir JOSEPH HOOKER for the last ten years has been trying to introduce it into England, and several trials have been made with it, but for some reason all have failed, excepting one made last year. A small crop of tubers was raised at the Botanic Gardens at Kew, and these have been widely distributed in Great Britain and Europe, thus providing for quite a number of trials. An engraving with the article referred to above shows that the form is irregular, like a small and longish Potato with one end a little crooked and drawn out; the size is an inch and a half in diameter the short way, and three inches lengthwise. If it succeeds again in Europe it will undoubtedly find its way here in a short time.



PLANT INQUIRIES.

Ought the Lobster Cactus to be dried off and rested, like other Cacti? Mine drops its joints if dry too long.

Some florists say that *Hoya carnosa* requires intense heat to grow and blossom well, and to be kept very wet. Is it true?

My *Euphorbia splendens* blossomed freely all last year, and in the spring I set it in the hot sun, outside, to rest, giving it plenty of water when I thought of it. This fall I brought it in without repotting, and it is in a rather small pot for a large lawn pot; I found that it had been growing all summer. Now its leaves turn yellow, though it continues to send out buds. What treatment does it require?

I have been unsuccessful with slipping *Bouvardias*, so I divided my red one, last summer, but both parts died to the ground and are not coming up now. Is there no way to increase it?

What treatment does *Plumbago Capensis* require? Mine is covered with mildew; and sulphur on the top, and all sorts of stimulants at the root to stir it into growth are so far unavailing.

With this letter I send a box containing some slips for naming; the *Begonia* is now four feet tall, with four or five stalks that each measure two inches in circumference at their base. It is very vigorous, but has never blossomed. Can you give me its name, and tell whether it ever blossoms or not? Other *Begonias* on the same stand are nearly always in bloom.

A friend gave me an Aloe-like plant, last summer, but knew nothing of its name or habit of blooming, nor, indeed, if it ever blossomed. It grows rapidly, and the plant is shaped much like an Aloe. Can you tell me if it blooms, and how old it must be, if so? I send you a leaf for you to examine.

Then there is another plant sent me from a florist, last spring, which is now in bud for the first time; it was not labeled, so I know nothing of the correct treatment for it. It is covered with mildew, though I have been applying sulphur vigorously for a week.

These are all of the sickly plants I have; dozens of others are growing rapidly, and Primroses, Geraniums, *Begonias*, *Lantanas*, &c., are in full bloom, while *Hyacinths* are pushing out buds in the cellar so early that I have several that have been taken to light windows already. A large bed of ever-blooming *Roses* is covered with evergreen boughs for protection, and I do not mean to spoil all by lifting them too early, as I did last spring. Another bed of *Carnation Pinks* is protected in the same manner, and I was very successful with them when so covered, last year.

How can I protect my *Roses* from those little green worms that eat the leaves till they make perfect skeletons of them? Florists must have some-

thing beside soap-suds and Hellebore to wash them with, if they are as troublesome everywhere, for one is obliged to wash all of the under side of the leaves once a week to keep them off, and then the leaves are apt to be injured if the suds is a little too strong. I have heard of using tar about the stalks. Can you tell me how it is used? I hope you will not find this too long to answer. I consider your MAGAZINE the best I ever saw of its kind.—F. E. S., *Palatine, Ill.*

A complete state of rest does not seem to be as essential to the Lobster Cactus, *Epiphyllum truncatum*, as to most other species. The plant should not be allowed to go so dry as to shrivel, but during autumn the supply of water should be gradually lessened, while at the same time the plant should be kept cool and be allowed plenty of air, causing its new growth to become firm and solid. Some time this month or next it can be placed in a higher temperature, say about 60°, and be given a little more water. As the season advances and growth progresses, both the heat and the water must be increased.

The Wax plant, or *Hoya*, does not require an intense heat, nor even a high heat. A warm greenhouse temperature of from 60° to 75° is enough for it in its growing season, and at other times can be much lower. It needs a moderately moist atmosphere, but only such an one as most others require.

The plant of *Euphorbia* can be shifted into a pot a size or two larger without much disturbing the roots, and receive a little fresh soil composed of about equal parts of loam and leaf mold with a small addition of sand. This should be packed well in all around. When the plant shows signs of blooming allow it manure water once or twice a week.

The *Bouvardia* is propagated both by cuttings of the roots and cuttings of the young or green wood, struck in sand with bottom heat.

Plumbago Capensis requires ordinary greenhouse treatment, and it is not at all a difficult plant to grow. In the case mentioned there is probably some difficulty with the roots. We should remove the plant from the pot, shake out the soil, trim off any diseased roots, and repot in a small pot in equal parts of loam, leaf mold and sand, give a little water and keep in a temperature for the present of 60° to 65°, but increasing in a few weeks. Water should have been stopped and the plant allowed to rest in autumn.

The specimen slips of *Begonia* have not been received. As all *Begonias* bloom, there is no doubt that this one does. So, also, the Aloe-like plant.

The nameless plant affected with mildew will probably not be benefitted by the sulphur application. Very likely it has had too much water at a time when it should be resting.

The worms that eat the Rose leaves may be destroyed by the use of Hellebore, the same as the Currant worm, using the powder dry or stirred in water; or by the use of Paris green in the well known ways.

NOTES AND INQUIRY.

Like SUSAN POWER, I have redeemed a home from the wilderness. Your MAGAZINE is a help and comfort to me; it rests me when tired, and its pages are filled with just the instruction I so much need. I take all the care of one orchard and flower garden. I have some of the best Apples and Pears in the county, raised from seed, also Apricots and Nectarines. Figs and Grapes do nicely here, and there is snow in sight on the high Sierras all the year. It is almost out of the world, and the birds and flowers and two little girls are my only comfort. The Washington Lily grows everywhere here, I cultivate it also; it should be raised under shrubs to do well. There is also a red Lily, something like a *Tuberosa*. Red Larkspur needs loose, rocky soil, and plenty of sunshine. Will Calla Lilies bloom in winter? Mine does not bloom at all, winter or summer. *Mazanita* blooms in February; it is a most beautiful shrub, and would do well in the east, as it grows on the highest mountains here.—R. F. K., *Plumas Co., Cal.*

The Red Larkspur mentioned above is *Delphinium nudicaule*. There is no place known where the Calla (*Richardia*) flourishes more freely than in most parts of California, and we presume that the locality of our correspondent is adapted to it. Why there is a failure in this particular case cannot be stated, but we should set several plants in different parts of the garden, and make further trial. Early in the fall is the best time there for removing plants.

ORANGE TREES IN POTS.

How old must an Orange or Lemon plant be before it blossoms? What treatment do these plants need for best growth in-doors? Do they need a period of rest in a dark place? Should they be kept potted all the time?—E. F. E., *Dansville, N. Y.*

Oranges and Lemons from seed, if well raised, come into bloom when from six to twelve years of age, an average period being about nine years. In this respect the plants are variable, like the different varieties of Apples and Pears. Some of the best and most highly prized varieties in cultivation are early bearing, and it is with these varieties that seedling stocks are budded in order to bring them quickly into bloom, not because the plants would not bloom in time if this operation were not performed. A soil consisting of equal parts of loam, leaf mold and well rotted stable manure is most suitable for the plants. Larger pots than the roots can well occupy should not be used; water should be plentifully supplied during active growth, but at other times sparingly. A temperature of 45° to 50° is sufficient for them during winter, but as spring approaches it can be gradually raised to 60° or 70°, and, of course, in summer, still higher. Frequent syringing of the foliage is beneficial, and will also tend to keep down insects. In their resting state, as already observed, the plants require a low temperature and a minimum of water, but should have the benefit of the light, and not be placed in the dark, as this would be unfavorable to the ripening and hardening of the wood. It is best to keep the plants in pots, shifting to those of larger size, as necessary.

DAPHNE.

Will you give some instruction in regard to the greenhouse species of *Daphne*? My plants seem to flourish for a time, and then the leaves droop and finally they die.—A. E. D.

Be sure that you have a proper soil, which should consist of one part sand, two parts leaf mold, and four parts of new, good loam, all mixed together. This plant is impatient of either too much or too little water, which, therefore, should be given with care.

ENGLISH HAWTHORN.

Can English Hawthorn be grown here?—MRS. A. B., *Cottonwood, Wash. Ter.*

Without doubt it will succeed well all through the northwest.

NEW YEAR'S SONG.

Feeble and old, through the shivering cold,
 We saw him tottering by,
 And the midnight bell rang like a knell,
 For the end was drawing nigh;
 On the warmth and light of our room, that night,
 He smiled, but turned aside,
 Then fixed his eye on the deep, blue sky,
 And so the old year died.

He had been our friend, and we watched his end,
 As the moments fled by;
 He died content, with a life well spent,
 And so may you and I!
 For his was a life of earnest strife,
 Till that mighty pulse was still'd,
 When he calmly died with a conscious pride,
 His mission was fulfilled.

As he tottered out, a joyous shout
 Arose on the midnight wind,
 And a dirge-like knell of the old church bell
 Was changed to a welcome kind,
 When with winning grace on his smiling face,
 'Midst mirthful greetings' din,
 Whilst friends around made joy abound,
 We let the New Year in.

—ROBERT CROMPTON.

AUSTRALIAN FLOWER SEEDS.

We received some of the Australian seeds, six kinds, and procured a soft soil for planting them in, and tried to care for them just right, but owing to weather, or something we did not quite understand, only one kind gave us plants, the *Acacia lutea*, and only two plants are living; rather odd-looking specimens, with tri-cornered leaves on slender stems, about six inches in height of Pea green color. We thought it would be very nice to have plants from a far country, and even if of the same kinds we thought they might be improvements. We think it no hurt at our home to love flowers, we look upon them more as nature's "beautiful thoughts" expressed in different forms and colors. We send thanks to you for kindness in sending us the seeds, and hope, if we try again, to meet with better success.—T. C. T., *Tecumseh, Mich.*

By reference to the last page of this number, it will be seen that we have on hand more of the Australian seeds, thanks to the kindness of Mr. GUILFOYLE, and that any of our friends who wish to try a few kinds are welcome to them.

HORTICULTURAL MEETING.

The Western New York Horticultural Society will commence its annual session in this city, on Wednesday, January 23d. The address of the president, P. BARRY, reports of the standing committees, and popular essays and discussions on horticultural subjects will be the principal features of the meeting. As this yearly gathering of those engaged in horticultural pursuits is always of much interest and profit, the friends of the society will, no doubt, very generally avail themselves of the privilege of attendance.

TWO NEW ROSES.

The well known nursery firm of ELLWANGER & BARRY, of this city, have just commenced to send out two new seedling Roses originated by them. One, called Marshall P. Wilder, is a remontant, and the other is a tea, named Rosalie, or Fairy Queen. The following is their account and description of them: "Marshall P. Wilder was raised by us from seed of the Gen. Jacqueminot, and has flowered three seasons, giving us amply time to judge correctly of its qualities. It is of vigorous growth, with healthy foliage; flowers large, semi-globular, full, well-formed; color cherry-carmine, much like a light colored Marie Baumann, or a shade deeper than Marie Rady, and very fragrant. In wood, foliage and form of flower, it resembles Alfred Colomb, but the seedling excels that famous variety in vigor, hardiness and freedom of bloom. The past season it continued to bloom profusely long after the remontants were out of flower. In brief, it may be described as an improved Alfred Colomb, and as good a Rose as has been raised by any one. It is undoubtedly the best American Rose yet offered, and the finest of the color.

"Rosalie, or Fairy Queen, was raised by us from seed of the Marie Van Houtte, and has been tested in our houses for some time. It is of slender yet healthy growth; foliage small dark green; flower small, a little larger than Paquerette, and of a deep pink color, about the shade of Madame Lambard. It is very pretty in bud, and the open flowers are of good substance, and remain perfect for a long time. It has a pleasing fragrance. One of its prominent traits is remarkable freedom of bloom, every shoot producing a flower. We consider it a distinct and charming miniature Rose, and a valuable addition to the list of varieties suitable for forcing."

CINERARIA.

Is the Cineraria a constant bloomer? Mine, raised from seed, bloomed beautifully for a time. Can I keep the plants in the cellar till spring?—Mrs. H. M., *Medina, Mich.*

Cineraria plants placed in a cellar would soon die. They should be kept through the winter in a moderate temperature in the greenhouse, conservatory, or closed window-garden. They need careful watching, and plenty of light, and to be kept free from insects.

HEDGES FOR ORNAMENT.

No one who has ever seen a rightly trimmed hedge of Spruce, Privet, Buckthorn, Barberry, Japan Quince, or Sweet Briar can have failed to perceive what an important element in the furnishing of a lawn it makes. It adds as much to the effect of all the decorative planting as a frame does to a handsome picture. And we possess now the immense advantage of being able to depend upon such a hedge alone for protection since the introduction of barbed wire. A single wire stretched along the hedge at about thirty inches from the ground effectually stops the breachiest of cattle, and is speedily hidden from sight by the growth of the plants, while the very unsightly and damaging paling fence, which used to be found indispensable as a support to the hedge, is no longer wanted. Nor do we need thorny plants or strong tree-like growers, so that the trimming of the hedge becomes an easy matter. Of those named above, the Privet combines, perhaps, the most good qualities. Like the others, it is not browsed by cattle, even where fully exposed. It grows thick enough at the base to stop the smallest dog, pig, or fowl; it is nearly evergreen, and of a dark rich green, excellent as a background for other shrubbery or for flowering plants. Its natural growth is erect, firm and hedge-like; it is very enduring, very rarely does a shoot die, and if that occurs others spring up freely. It is the easiest of propagation and easiest to trim, growing from cuttings very readily. South of Philadelphia the California Privet, *L. ovalifolium*, is as hardy as the common Privet is in the north. It has larger leaves, of a lighter green, very bright and glossy.—W.

WINTER BLOOMING ROSES.

I owe so much of my success in the culture of flowers to the study of VICK'S publications that I am moved to send you my experience in the case of a few winter blooming Roses.

Many years ago, in the old-fashioned kitchen of my childhood's home, in the high south window the Roses bloomed beautifully all the long, cold winter. The varieties were a white Rose with a brambly foliage, then called Bramble, or Bridal Rose, a multiflora, (we waited seven years before it bloomed,) and a

pink, very free blooming Rose. Since that time I have tried at various times, but with little success, the culture of Roses. The luck, as people called it, which our mothers had, I attribute to the constant moisture of the kitchen united with a love of flowers, for only with a real love for them can that most difficult of all kinds, the Rose, be successfully cultivated. I saw in a late paper on the care of flowers, this paragraph: "It must be left to the cook with the steaming tea-kettle to bring Roses and Carnations to perfection."

Having recently a new bay window, I determined to try a few Roses. I started with three. One was left by a friend, and all I could learn of it was that the buds rarely opened; the others were not a foot in height, the Pauline and Bon Silene. The room was heated by an open wood fire, and contained little moisture, but by removing the Roses to another room daily, and sprinkling the foliage, upper and under side with tepid water, and sprinkling a small quantity of bone dust with a mulching of moss on each, they very soon rewarded the care bestowed on them. New shoots, some of them thirty inches in height, were thickly set with buds, and the Rose which had seldom bloomed, before winter was over, was adorned with sixty-five very full and fragrant blossoms, one shoot had fourteen perfect Roses. The Pauline, although quite small, had forty-five blooms, the Bon Silene only four through the winter.—N. E. P.

POTTING AND REPOTTING.

Please say in your next number when is the best time to repot Oleander and Catalonian Jasmine? Is *Lilium Harrisii* of such a nature as to flourish in the house, and should it have much sun light, and be liberally watered?—MRS. F. M. E., *Coman's Well, Va.*

Oleander should be repotted early in spring, before it commences its growth. The Jasmine about the same time will have passed through its flowering season, and is then in condition for repotting. *Lilium Harrisii* does well under pot culture. When a bulb is first potted it should be set away in a cool, dark place, such as the cellar affords, until it has filled the soil with roots, or until they have reached the sides of the pot; then the plant should be brought to the light, and water given in increasing quantities as its growth demands.

MOURNING BRIDE.

The double varieties of Scabious, *Scabiosa atropurpurea*, are exceedingly interesting and useful plants. There are varieties that grow from two to three feet in height, and others that are dwarf and branchy; the varieties of colors and the appearance of the flowers are similar with the two styles of growth, and a very correct idea of them is conveyed by the plate in this number, with the explanation that the lilac shade in the bluish flower should be more positive and uniformly displayed. At the right hand side of the plate is represented a seed-vessel of *S. stellata*. These seed-vessels are very pretty ornaments, and can be preserved and used in bouquets of grasses and everlastings. The tall and the dwarf varieties are equally valuable in the garden, as they produce great numbers of their showy blooms that can be used as cut flowers. These are light and airy in appearance and the colors very desirable, and, besides, agreeably fragrant. Although the Scabious is a biennial plant, it produces its flowers the first year, blooming in some six or eight weeks from time of seed sowing, and continuing into the autumn. By starting the plants early in the house and planting out as soon as danger from frost is past, and by successive sowings in the open ground, and the protection of frames in the fall, they can be had in bloom for many months. For winter blooming they are also coming to be highly prized. For this purpose the dwarf varieties are preferred, and are sowed in pots at different times during the fall, and brought into the greenhouse as needed. With good treatment they produce a great amount of bloom. The seeds are usually sent out with the varieties mixed, as few care to take the extra trouble of keeping the different colors separate, since all are desirable.

ARBOREAL BEAUTY.

The beauty of English landscape, as compared with that of nearly all the countries of Europe and Asia, is due to the care that is taken of trees, and the great variety grown. Spots unsuitable for cultivation are covered and hidden by foliage. Country dwellings are masked and belted by it, with openings only in the direction of best views, or to admit

the sunshine, which never burns there. The fields, generally rather small, are enclosed by hedges, which are annually clipped, and along which, with pleasing irregularity, stand here and there single trees or groups of various useful and well preserved trees. Some of these, called pollards or stockles, are stems grown up far enough to be out of the reach of cattle, the branches from which are thinned out by careful, smooth cutting close to the knobby crown as they are wanted; but there is none of that close clipping seen in France and Germany, where it is often rare to see a tree allowed to grow in its own easy, graceful, free, luxuriant way. These trees afford shade to the animals pasturing in the meadows and fields, and useful shelter from storms; and those at the gates and roads especially, are often useful in the same way to their superiors. In our climate there is greater need than in England of this arboreal beauty and defense, and it can be easily gained by setting a few young plants of valuable sorts of trees, as Locust, Catalpa, Chestnut, Walnut, Oak, &c., in a corner of the garden, three or four feet apart, to be transplanted when large enough to carry their leaves up out of reach of cattle. Of these the Oak and the nuts dislike to be moved, and do best when the seed can be put in where the tree is to remain.—W.

A POISONOUS WOOD.

A late number of that valuable health weekly, *The Sanitarian*, notices "that the use of a wood from Panama, called Cokobola, in the manufacturing interests in Bridgeport, is attracting the attention of the Connecticut State Board of Health. The wood is cheap, takes a brilliant polish, is easily worked, and is extensively used for knife handles and ornamentation. Workers in the material are poisoned somewhat after the manner of sumac, although some are free from any defect. Swelling of the face, closing of the eyes, appearance of being burned on the hands are the usual symptoms. Some are attacked with distress in the stomach, with loss of appetite. One person who was a confirmed smoker, after being poisoned has been unable to smoke or even stay in a room where there is any tobacco smoke. Children playing in the saw-dust of this wood, which has been

dumped, were badly poisoned about their feet. At a large factory on Elm Street, where this wood is extensively worked, chickens in the adjoining yards are said to have all died from eating the dust that settles on the grass."

The wood in question is probably that of some species of *Cocoloba*, which is a native of tropical America. The *Cocoloba* is called the Seaside Grape, in allusion to its usual place of growth, and the appearance of its fruit. What is known as Jamaica Kino is prepared from the leaves, wood and bark of *C. uvifera*. This substance is an astringent extract.

TRAVELING SCAMPS.

Early last summer, a rather tall gentleman made his appearance, calling himself JOHN THORP, claiming to be from New York. He had packages of *Gladiolus*, fourteen in each package, which he said were all new colors, among others blue and also black, as black as the King of the Blacks in Pansies. His price for the package was two dollars and ninety-seven cents if paid at once, and seven dollars if paid in July, as he said he would be around in that month and collect all the offsets which the bulbs had formed. He sold, to my knowledge, about ten sets or packages; he wanted all that bought the bulbs to plant the same in pots, as he said they were a new dwarf variety, and required pot-culture. Some of those that bought planted in pots, but the plants never bloomed. I, among some others, planted in the open ground. The result when they bloomed was so great that I pulled them up, one after another, and threw them over the fence, they being only common crimson and scarlet. Mr. THORP never called in July, and, of course, we were so much out, but wiser for the future.

Along in July we had another agent, or rather, tramp; he claimed he was sent out by JAMES VICK, of Rochester, N. Y. I had two large Oleanders on my porch, a pink and a single white one. He said he could graft the trees and that they both would bear variegated flowers. As it was too plain to see that a firm like that of JAMES VICK would not send out a man with his toes out of his boots, and his clothes of the regular tramp style, I did not give him a job to graft.—CHAS. T. SCHULLER, *LaSalle, Ill.*

ENDURANCE OF PLANTS.

Where men are most exposed to the severities of climate they learn many things which quite escape the observation of those who have balmy air and easier lives. Knowledge increases and invention abounds where there is the greatest struggle for existence, for necessity urges to invention. When the Fahrenheit thermometer scale was arranged, it was supposed that zero marked the extreme degree of cold. Now, the most prosperous communities of the human race are found where the air to be breathed is as far below zero as zero is below the freezing point. In those trying climates we learn more about the endurance of plants and their measure of resistance to cold than we could otherwise know. For instance, in a trial of the seedlings from several leading sorts of Apples grown in Pennsylvania, those from the large meaty seeds of the Bellflower, and other large, high class, few-seeded Apples, seem as hardy as any, while they make stouter, freer growth. But in Iowa, Prof. BUDD has found that the seedlings of the slower-growing, half wild looking Red Romanite are the hardiest, which is the first consideration there, and a main point everywhere, for in mild climates severe winters occasionally occur. The Romanite seedlings he finds more even in size, more abundantly supplied with roots, and with a cell structure better stored than in seedlings from more refined Apples.—W.

WINNOWNED AND SCREENED.

Mr. H. P. VAN DUSEN, of the Wayne County Evaporated Fruit Company, writes to the *Cultivator and Country Gentleman* that "We have among our varieties of Raspberries, the Doolittle, a hardy, prolific, early berry, well known every where, and which has not, as yet, been superseded as an early kind by any of the well tried ones. The Tyler and Souhegan promise well, and we hope will be an improvement. Mammoth Cluster was discarded years ago. It is half-hardy here, a bad winter nearly ruins it; the berry is soft, of good quality, but it dries badly. The Ohio is perfectly hardy here; will average one-half stronger than the Doolittle; it is more prolific, sweeter, more solid, and makes from one-fourth to one-third more dried fruit to the same

number of quarts. The Gregg has a berry very large, showy for market, but inferior in flavor. The cane is considered strong, but does not bear hardship. One year, with us, the crop was more than half ruined by winter-killing. It is more affected by extremes of either wet or drouth than any variety we have. During the three years we have had it, it has not averaged to yield more than half the quantity of Ohio. Among the red Raspberries we have found nothing better for marketing than the Cuthbert or Lost Rubies, and for drying or canning we think very much of Shaffer's Colossal."

Scott County, Iowa, raised, last year, 425,000 bushels of Onions, which brought the producers varying prices from seventy-five to twenty-five cents a bushel, an estimated average being forty cents. The Potato crop of the same county was 400,000 bushels, marketing at an average of twenty cents.

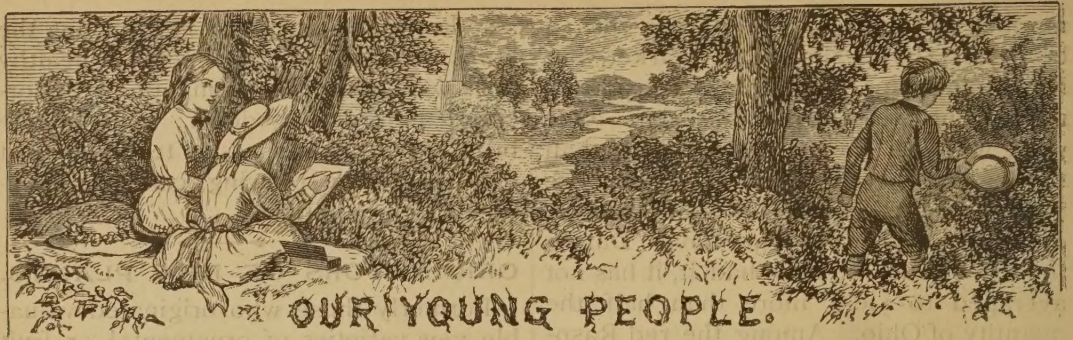
Mr. N. ATWELL, of Lawton, Van Buren County, Michigan, one of the State Commissioners for examining Peach trees and condemning those affected with the yellows, states that he has "examined over twenty thousand Peach trees the past season, many of them growing upon the best soil, and receiving the best of cultivation, and I find that it makes no difference about the soil or cultivation. The only essential in spreading the disease is the proximity of diseased trees. I also find that in orchards and neighborhoods where vigilance in destroying infected trees has been exercised in the past, the percentage of infected trees is small; where negligence has been the rule, the percentage is large. In several instances I found infected trees growing on new land. I found one young orchard occupying land that only four years ago was covered with an original forest of Oak and Hickory. The Peach trees were not yet of bearing age, but had received the best of cultivation each year, and yet the same percentage of diseased trees were found that existed in other orchards of the same age, growing upon the poorest of soil, when similarly exposed to contagion." The disease, he says, is spread by using the same knife or saw upon healthy trees after its use upon diseased ones without disinfecting it by means of carbolic acid. Instances are

also known of its spread by brushing the limbs of diseased trees against healthy ones when dragging them out of the orchard after cutting down; also, by the brushing of the harness of teams against the trees when plowing, carrying infection from tree to tree.

ORIGINATORS OF NEW PLANTS.

Formerly those who originated valuable new varieties of ornamental or fruit plants thought themselves well repaid by the honor received from the public for their worthy efforts. Now these originators desire nothing less substantial than cash returns. Congress has been asked to make laws to protect the plant originators on the same grounds that the inventor is protected, namely, that the new variety equally with the newly invented article represents the skill, time, and money employed in producing it. That this is true all must admit. The practical difficulties in framing laws for this purpose are quite apparent, and legislators fear to engage in the undertaking. In the meantime plant originators are trying to secure themselves; but the issue is still uncertain. The case of the Niagara Grape Company is well known, and if its methods are found efficient they may be adopted by others. We have not yet heard of a legal test of the method, though there is very little doubt that one could be made if the company were so disposed. Discretion is commendable.

The latest interesting case of this kind is that of the sale of the new Rose, Wm. Francis Bennett, by its originator Mr. HENRY BENNETT, of London, England, to Mr. EVANS, of Philadelphia, for the sum of \$3,750. One of the conditions of the sale is that Mr. EVANS shall not dispose of any cuttings of plants of this Rose for four years, but must make his profits from the sale of the cut flowers. Since the flowers cannot be sold without more or less stem attached, the question now is how the provisions of the sale are to be maintained, inasmuch as a plant can be propagated from a single bud. Before disposing of the flowers every bud on the stems must be destroyed, and destroyed so as to leave the commercial value of the flowers unimpaired. But how is it to be certainly done? Wise heads are pondering on it.



BEFORE CHRISTMAS.

II.

When Pearl Warren awakened, next morning, after the visit to Mr. Boyd, and found the weather bitterly cold, she thought first thing of the poor man having to alternate all day between his seat at the stove and the cold bed in the bedroom, from his inability to sit up long, and his sensitiveness to chill, and she said to herself, "Yes, 'where there's a will there's' always 'a way,' and an adjustable chair he must have." As her mother had offered no help in the matter, she kept her cogitations to herself, hoping some way would open.

On being reminded of the neglected lessons of the evening before, Pearl replied that the classes were all having a general review that week, and that fortunately she had only to look over her lessons once to refresh her memory. Then, taking her Latin book, and glancing a page, she said, "Here's a fable, mother; let me translate it aloud:

" 'A certain woman had a hen which laid to her, daily, a golden egg. On this account she began to suspect a mass of gold concealed within her, and she killed the hen, but found nothing except that which is wont to be found in other hens. Therefore, while desiring great riches, she lost even the little she had.' "

"I do wish," said Pearl, laughing, "that Mrs. Boyd had such a hen just now. O dear! Well, here's another fable, listen, please.

" 'An old man, when he thought death was approaching, called his sons, whom he knew were wont to differ among themselves, and ordered them to bring him a bundle of sticks, which having been brought, he exhorted his sons that they should break this bundle, which, when they were not able to do, he distributed

the twigs among them, one by one, which they broke quickly. And this having been done, he taught them what a firm thing concord may be, and how weak is discord.' "

"This translation is not quite literal," Pearl continued, "but the meaning is, and it reminds me, mother, that Mrs. Boyd told me that a feeling of 'discord' had been created among the church people about helping them, because of her usually being better dressed than some of them could afford. She added that all her good clothing had been remodeled from purchases made long ago, and it had not occurred to her that she ought to make a bonfire of them because they were now so poor, since their destruction could benefit no one. So you see that if the church brethren and sisters had worked in 'concord' they would have been strong enough to have done all that was needed."

"Very true," said Mrs. Warren, "and that explains what I could not understand. The few did what they could, and the rest was left undone. But now go on with your lessons, dear, and do not worry too much about Mr. Boyd. I've no doubt he feels very comfortably fixed since your visit, last night."

"Our visit, she said, and then turning over the leaves of her book, she exclaimed, "I know all we shall review to-day; and now for my geometry." Directly she was rattling away its elementary theorems, and her mother wondered at the receptive memory of young persons, as she heard the continuous lingo, with book closed, except at intervals.

" 'Between a tangent and a secant line the arcs intercepted between the point of tangency and the secant are equal.' O, mother, do you care very much for that old volume of Fox's Book of Martyrs?"

"Why, child! where is your mind running to now?"

"Well, do you really care for it? For my part, I never want to look at it again. It's perfectly awful to think of those poor creatures impaled on spikes, and dis-jointed with ropes and cranks, and scalded in great caldrons and tortured with——."

"Well, well; don't think of it again, my dear, especially, just now; but think of your recitations coming so soon."

"Sure enough, it's almost class-time, and I've an errand to do." And up jumped Pearl, and donning her wraps and grasping her books, hurried away. Going directly to a second-hand furniture store, she soon found just one adjustable chair. But the colored owner of the motley collection assured her that the chair was to be covered and sold, and therefore could not be rented. The last remark was a damper, to be sure, but Pearl was not to be easily daunted, and soon after she entered a second-hand book store and inquired of the dealer if he would purchase an old volume of Fox's Book of Martyrs. He first inquired its age, but she could only tell him that its s'es looked like f's, and that therefore it must be old; at which he smiled and told her she might bring it for inspection.

Upon going home, Pearl did not mention the preliminary steps taken to secure a chair, as the issue still seemed to be too doubtful to promise success. But she did announce that there was to be an unexpected examination in the "conservatory," next day, of the class in "Harmony," preparatory to a more important one to be conducted before the great Prof. Blank, who was soon to visit them. So, with her Manual of Harmony before her, she sat a long time at the piano, and afterwards ran over volubly from memory some notes she had jotted down from early oral instructions, something like this:

"The second chord of a major key is very like a diminished fifth, but is generally called minor, and the third is to be doubled in preference to the fundamental or fifth. The third of a major chord of the sixth should not be doubled; the third of a minor chord of the sixth may be doubled, and the third of a diminished chord of the sixth must be doubled."

"O, daughter, how can you remember that gibberish?" called out Mrs. Warren, through the open door.

"Because," laughed Pearl, "it is so 'doubled' up in my head that it can't squirm out, I suppose. You never studied Harmony, did you, mother?"

"Yes, all my life, and have thus avoided discords," was the answer.

"I understand," said Pearl, "and that sort of harmony is the best kind, after all. But, mother, dear," she said, rushing to her and dropping down in a low seat, "I have a 'doubled' scheme in mind, by which I hope to secure the use of a chair for our invalid. Would you really care if I were to sell the Book of Martyrs?"

"Explain your 'doubled' scheme, please."

"Well, if I could sell the book at a second-hand book store, and with a part of the money secure a chair at a second-hand furniture store, would not that be a doubling of the second-hand facilities for gaining my end?"

"O nonsense, Pearl; you have either 'doubled' your wits to-day or lost them altogether, I scarcely know which. As for the book, you may first learn what you can get for it, before I decide about selling it."

We will now skip over an interval, during which the book was sold for eight dollars, the money being divided between mother and daughter, and follow them to the second floor of the furniture store, where Mrs. Warren is mentally disapproving of her daughter having ventured there alone; while Pearl is already trying to overcome the sable dealer's obstinacy by exciting his easily provoked mirth. Finally, she places a half dollar on a crippled stand, upon which an enormous black cat instantly leaps to scrutinize the money, and says:

"Who ever heard of such fearful interest as I offer you! fifty cents a month on six dollars, at the rate of a hundred per cent.! In a year the principal would be doubled."

"But when that cha'h's fixed up I shall sell it fo' ten dollars."

"But it only cost you six. The State law allows but six per cent. interest, and all you get out of me above that is usury. Just think of it! and the chair will be yours after all. Look at your cat, do you feed it on money? It has smelled that piece on one side, and is trying to turn it over. There, pussy, I'll turn it for you. You shall smell both sides. Now, see

how it looks at you. It finds the money all right, and wonders why you don't put it in your pocket; and so do I."

"But, Miss, I tol' you I had 'fused that cha'h to doctah Ha'tman and doctah Sma't, when they wanted it fo' they poo' sick patients, and now they'd be 'fended if I'd let a strange'h have it."

"No, they wouldn't. They'd understand perfectly well that no colored gentleman could refuse a lady's request. How much would that drayman, down in the street, charge to take that chair two or three squares?"

"'Bout a qua'tah, I reckon, that is, ef he got the chance. But see ye'ah, Miss, that thah man might die in this cha'h, an' folks is mighty sup'stitious, an' I couldn't sell it after that, no how."

"I didn't know that you had to tell your customers that somebody had died on your old bedsteads and lounges and chairs. How ever did you learn that you are never to be sick and die?"

"Didn't never find that out yit."

"And whom do you expect will take care of you when you come to be sick?"

"'Fo' de Lawd, I don't know; got no wife or children, but that cat."

"Well, don't you know that if you were kind and obliging to people in trouble that you would find friends when your turn comes? Even mother and I would not let you suffer if we knew of it. But I must hurry on to Mrs. Boyd's so as to be there when the chair is delivered. Come, mother. And now, good morning, and do take care of that money, or is the cat your banker?"

After an explosive burst of laughter, which could no longer be repressed, the man said, "O, you go 'long, Miss, I've c'luded to tote the cha'h on a wheel-ba-row myself." As they left the room he tumbled full length on a lounge, quite overcome with his coarse mirth, exclaiming to himself, "This niggah done got beat by a gal aftah all," and his prolonged guffaws of laughter could be heard down on the street.

"And so you have gained your point by persistently assuming that he could not refuse you," said Mrs. Warren.

"So it would seem; what an obstinate goose he is."

"Sharp enough though to see through your tactics, and it like to have been too much for him. I was afraid he would see

me shaking with laughter as I stood looking out of the window. But I must leave you and go home now, hoping you'll soon see the chair again."

Pearl found Mr. Boyd lying down in the bedroom, and noticed that the window was thickly covered with frost. Directly she saw the wheel-barrow, with its burden, approaching, and asking Mrs. Boyd to occupy the invalid's attention, she stepped outside and motioned the man to silence. It took but a few moments to get the chair noiselessly inside, and to make the exchange of covers, and put the hard, stiff rocker out of sight. Pearl then gave Mrs. Boyd the wink, and stepped into the back room, motioning the man to follow.

Presently Mrs. Boyd opened the door and motioned them in. Mr. Boyd was reclining in the roomy, springy chair, with face turned aside and his handkerchief pressed to his eyes, evidently overcome with emotion. Pearl pointed the man to a chair, and taking up a book with some remark about it, commenced reading aloud, finally ending with a story about a remarkable cat that could tell good money from counterfeit by smelling it, and therefore was installed as his master's banker. Pearl dared not look up, but when Mrs. Boyd said she did not know that such a story was in the book, the man plunged for the door with a snort; though Mrs. Boyd said afterwards, that only a moment before he had seemed just ready to cry as he looked at Mr. Boyd.

Pearl followed him out to pay him for bringing the chair, but he put his hands behind him, saying, "I don't cha'ge fo' totin the cha'h; an' 'fo' de Lawd, Miss, I'm glad I brung it."

Now, all the acts, first and last, of a girl like Pearl Warren, should they be written, behold the many volumes of VICK could not contain the bulk thereof!
—AUNT MARJORIE.

PANSIES.—Pansy seed sowed in a box of fine, rich soil, any time this month, and, after germinating, kept in a very cool place, though away from frost, and where there is plenty of light, will make fine little plants for the garden early in spring.